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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,776	07/28/2003	Stuart D. Hellring	1673P1	5340

7590 11/30/2005

PPG Industries, Inc.  
Law-Intellectual Property 39S  
One PPG Place  
Pittsburgh, PA 15272

EXAMINER
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GOUDREAU, GEORGE A

ART UNIT	PAPER NUMBER
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1763

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/627,776

Applicant(s)

HELLRING ET AL.

Examiner

George A. Goudreau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 27-31 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 36 is/are allowed.
- 6) ☒ Claim(s) 1,2,6-9,13,23-26,32-35,37-39 and 43-45 is/are rejected.
- 7) ☒ Claim(s) 3-5,10-12,14-22 and 40-42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

*George Goudreau*  
GEORGE GOUDREAU  
PRIMARY EXAMINER  
11-051

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 6-9, 13, 23-26, 38-39, and 43-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Maloney et. al. (4,443,357).

Maloney et. al. disclose an aqueous slurry comprised of precipitated silica (i.e.-G30 Quso). Each silica particle has the following characteristics:

-8 OH groups/ nm<sup>2</sup>;

-12 NM. diameter; and

-300 m<sup>2</sup>/ GM surface area.

The G30 Quso silica may be wet milled to (5-50) NM or (0.005-0.005) microns.

This is discussed specifically in columns 7-8; and discussed in general in columns 1-26.

It is inherent that the H<sub>2</sub>O in the slurry taught above comprises a type of oxidant. Thus, all of applicant's claimed limitations are fully met in this regard. The examiner cites the case law listed below of interest to applicant in this regard.

In re Swinehart (169 U.S.P.Q. 226 (CCPA )) and In re Best (195 U.S.P.Q. 430 (CCPA )) state that when an examiner has reasonable basis for believing that functional characteristics asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be inherent characteristics of the prior art, the examiner possesses the authority to require an applicant to prove that the subject matter shown to be in the prior art does not possess the characteristics relied upon.

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3. Claims 32, 34-35, 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Persello (5,286,478).

Persello discloses precipitated silica with the following characteristics:

- BET=400 m<sup>2</sup>/ GM;
- CTAB=350 m<sup>2</sup>/ GM;
- oil uptake of 300 cm<sup>3</sup>/ 100 GM;
- 1.5 micron mean particles size; and
- BET/ CTAB ratio= 1.3

Alternatively, Persello disclose precipitated silica with the following characteristics:

- BET=100 m<sup>2</sup>/ GM;
- CTAB=60 m<sup>2</sup>/ GM;
- 10 micron mean particle size;
- oil uptake of 100 cm<sup>3</sup>/ GM; and
- 8 OH groups/ NM<sup>2</sup>

This is discussed specifically in columns 21-22; and discussed in general in columns 1-24.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over the reference as applied in paragraph 2 above.

The reference as applied in paragraph 2 above fail to disclose the following aspects of applicant's claimed invention:

-the specific usage of a double jet cell process to reduce the size of the aggregate particles in the slurry

It would have been obvious to one skilled in the art to employ the usage of a double jet cell process to reduce the aggregate size of the silica particles in the slurry taught above in place of the milling processes which are generically taught for reducing the size of the agglomerate silica particles in the slurry taught above based upon the following. The usage of a double jet cell milling process to reduce the aggregate size of silica particles is conventional or at least well known in the colloidal arts. (The examiner takes official notice in this regard.) Further, this simply represents the usage of an

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alternative, and at least equivalent means for conducting the milling process in the process taught above to the specific means, which are taught above.

7. Claims 3-5, 10-12, 14-22, and 40-42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claim 36 is allowed.

9. Any inquiry concerning this communication should be directed to examiner

George A. Goudreau at telephone number (571)-272-1434.

  
George A. Goudreau  
Primary Examiner  
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